CHORD CONUNDRUM: EXAMINING THE PERFORMANCE PRACTICE OF POLYPHONIC FIGURES IN J.S. BACH'S SOLO VIOLIN WORKS

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Chord Conundrum: Examining the Performance
Practice of Polyphonic Figures in J.S. Bach's Solo Violin Works
by
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Interpreting and expressing the musical intentions of a composer in an informed manner requires great dedication and study on the part of a performer. This holds particularly true in the case of music written well before the present age, where direct connections to the thoughts of the composer and even the styles of the era have faded with the passing of time. Violinists today consistently struggle with studying and performing a set of works from the musical period referred to by scholars as the Baroque era (1600-1750), the *Sonatas and Partitas for Violin without Bass accompaniment*, composed by Johann Sebastian Bach (1685-1750). These six works pose significant technical challenges in the form of sustained three and four note chords. Violinists and scholars have long debated the proper stylistic performance of these chords; a truly informed interpretation requires careful study not only of the instrument used during the 17th and 18th centuries, but also of scholarly writings from the time, and analysis of the works themselves.

Prior to about the year 1600, vocal music was the highest regarded and most often composed of all musical literature. During the era referred to as the Renaissance (1400-1600), numerous composers wrote for instruments, but in general intended the instruments to accompany the voice, harmonizing or providing a countermelody to a madrigal. Furthermore, these composers often left the instrumentation – with the exception of keyboard accompaniments – open-ended, placing the sonority choice in the hands of the performer or allowing flexibility based on what instruments and musicians might be available. However, by about 1600, instrumental music began to gain prominence, in part resulting from innovations by two composers whose lives spanned a period during which musical styles changed significantly. In his operas, Claudio

Monteverdi (1567-1643) assigned parts to specific instruments in the score, additionally expanding their importance in the musical texture (Burkholder 316). Giovanni Gabrieli (1554-1612) wrote many compositions for *cori spezzati*, or divided choirs, in which multiple groups of voices alternate singing sections of a piece. Noting its success with vocal ensembles, he applied the principle to works written solely for choirs of instruments (283). Out of such innovations came the composition of musical forms exclusively featuring non-vocal instruments: keyboard instruments, such as the harpsichord and organ, certain wind instruments, notably the transverse flute and the bassoon, and the string family, including the lute, viola da gamba, cello, and perhaps most extensively, the violin (Boyden 98).

The violin is one of the most versatile instruments, due to its large pitch range, variety of articulations, range of tone colors and dynamics, and ability to sustain its sound. Beginning in the 17th century, composers realized the full potential of the instrument, and as a result, music surfaced that challenged players to stretch their technical abilities (99). Italian violinist-composers such as Archangelo Corelli (1653-1713) and Antonio Vivaldi (1678-1741) were influential in this respect, expanding the range of the violin to new heights and introducing double and multiple stops – two or more notes written to be played simultaneously – into their compositions. Furthermore and particularly in the case of Vivaldi, virtuosic passages with quick arpeggiations, fast scalar runs, and the use of new bow techniques, permeated these works (284).

Throughout the Baroque era, a body of violin solo and chamber music repertoire blossomed as composers across Europe embraced the melodic possibilities of the instrument. From concertos, concerti grossi, and trio sonatas in Italy to dance suites in

France, and even a number of unaccompanied works in Germany, the violin was well represented in each major musical country. While performing technique and compositional styles generally remained nationalized throughout the 17th and 18th centuries, composers were to some degree influenced by musical information traveling between different countries (284). As in the case of a certain German composer, Johann Sebastian Bach, assimilating the compositional ideals of his native country with those from France and Italy defined the entire body of his work, including his many works for the violin.

Bach, while as a performer best remembered for his skills at the organ and harpsichord, was an accomplished and successful violinist. His father, Johann Ambrosius, who worked as the director of the music company in Johann Sebastian's hometown of Eisenach, Germany, played the violin as his primary instrument, and likely taught the younger Bach how to play (Wolff 23, 42). As a student at St. Michael's School in Lüneberg, J.S. Bach's musical studies focused primarily on vocal performance, and later, keyboard lessons (59). However, in his ensuing professional career, he held positions on several occasions requiring him to perform extensively on the violin.

In his first position following graduation, Bach briefly worked as a violinist in the court at Weimar in 1703 (Lester 9). He would return there five years later, hired as the court organist as well as chamber musician. In 1714, he received a promotion to concertmaster, in which Bach led the court orchestra seated in and performing from the first violin chair (Wolff 148). For him to have earned this placement suggests that his violin technique was well developed. One of his sons, Carl Philipp Emanuel (1714-1788), in a letter to the earliest Bach biographer, Johann Nikolaus Forkel, notes "in his

youth, and until the approach of old age, [Bach] played the violin cleanly and penetratingly…" (Bach 397). Following a change of employment in 1717, Bach did not actively perform on the violin; however, Carl Philipp Emanuel, in this anecdote, suggests that his father continued to study and play the instrument at home. His deep knowledge of the violin and its technical abilities coupled with his compositional prowess reflects itself in all his works for the instrument.

Following the concertmaster post in Weimar, Bach and his family moved to the town of Cöthen, where he took up the position of Kapellmeister, or music director, for the Prince of Anhalt-Cöthen (Wolff 187). There he composed the *Sonatas and Partitas for Violin without Bass accompaniment* no later than 1720, according to the date on one extant original autograph manuscript (Vogt 17). Musicologist Malcolm Boyd speculates that Bach had a performer in mind while composing these six works, offering the names of violinists Joseph Speiss, Johann Georg Pisendel, and Jean Baptiste Volumier (Boyd 95). Alternatively, other scholars, such as Hans Vogt, suggest that Bach did not anticipate the public performance of these works, but instead intended them to be technical studies (Vogt 167).

Regardless of his intent, violinists over hundreds of years have included these works in their standard repertoire; today, their study and performance has reached ubiquity. Even in the generation following Bach's death in 1750, a period in which Bach's music was considered old-fashioned, musicians affirmed the worth of the Sonatas and Partitas in particular. Carl Philipp Emanuel, again in his correspondence with Forkel, notes "one of the greatest violinists told me once that he had seen nothing more perfect for learning to be a good violinist, and could suggest nothing better to anyone eager to

learn, than the said violin solos without bass" (Bach 397). Likewise Forkel, in his 1812 biography of Bach, affirms this sentiment writing, "for a long series of years, the violin solos were universally considered by the greatest performers on the violin as the best means to make an ambitious student a perfect master of his instrument" (Forkel 472). The technical and musical challenges presented by these works to violinists in the 18th century fully remain even today despite a significant increase in general technical abilities.

As the title suggests, the *Sonatas and Partitas for Violin without Bass accompaniment* lack a part for the basso continuo – the joint union of a keyboard instrument and single-voiced bass instrument – which would normally provide harmonic elaboration. Unaccompanied works for the violin appeared prior to Bach's collection, notably by his German predecessors – composers such as Heinrich Biber (1644-1704) and Johann Paul von Westhoff (1656-1705); however the bulk of Baroque sonatas for typically monophonic – single voice – instruments had at least some form of keyboard accompaniment, and usually a complete continuo part (Boyd 95). The fact that Bach took care to include on the front page of his manuscript as well as in the titles of each individual sonata or partita the qualifier "without bass" reveals the universality of the basso continuo in the Baroque era (Lester 11). In these works, Bach uses variations in the instrument's range as well as the presence of four unique strings to provide a harmonic context on an instrument that usually plays one solo line, doing so in two contrasting manners.

Scholars refer to the first compositional technique as linear counterpoint, in which Bach composes a solely monophonic line throughout an entire movement or section of a

movement. To provide the harmonic context, some or all of the notes of each chord in a progression are outlined, sometimes through simple arpeggiation but at other times integrated with other non-harmonic tones. He then uses wide interval contrasts between pitches and differences in timbre between the violin's four strings to create the aural perception of multiple voice polyphony, most commonly the sense of a bass line separated from melodic figurations (Kurth 76-77).

However, in other movements of the works, Bach requires the violinist to perform multiple notes simultaneously in order either to fill out harmonies, or create the sensation of polyphony. While most double-stops can be negotiated without much difficulty aside from achieving accurate intonation, triple and quadruple stops, particularly many that appear in the Sonatas, pose a greater challenge to performers. Not only does Bach occasionally require tricky left hand fingerings, engaging all or even three of the violin's strings simultaneously with a pleasing tone quality remains a significant challenge to the modern performer. Furthermore, when assessing a literal reading of Bach's scores, one discovers numerous instances in which he writes that all notes of a three or four note chord should be sustained for equal durations, and moreover for lengths of time requiring an extended continuance of the sound (Lester 47).

Such challenges result in a range of opinions regarding the performance of three and four note chords in Bach's violin music: performers must consider how long to sustain individual notes within the chord, whether or not all notes of the chord will be attempted simultaneously – and if not, then how much breaking of the chord will occur – and the desired tone quality and dynamic level of the chord. Additionally, in the three fugue movements, violinists must be concerned with emphasizing the fugue theme

throughout in spite of triple and quadruple stops seemingly interrupting the melodic figure. Some performers will base their musical judgments on what best suits modern technique and the modern instrument; however, others wish to adhere to historical performance practice as much as possible whether performing on a modern or a period violin.

Unfortunately no record exists of how Bach himself would have performed or encouraged others to perform the *Sonatas and Partitas*, much less the chords within. Furthermore, no definitive record of their performance or the practice thereof from the 18th century exists. However, alternative sources provide significant insights from which conclusions about performance may be drawn. Considering the structure of the violin and bow used in the early 18th century functionally reveals some technical possibilities and limitations. Additionally, treatises on musical performance written by scholars living in the generation following Bach's death, while not specifically referencing the *Sonatas and Partitas*, describe standard execution of violin technique in the 1700s. Finally, by analyzing the scores of the works themselves, Bach's musical intentions can be more fully understood. As the three fugue movements provide some of the greatest and most consistent challenges to violinists regarding the performance of chords, they are the most suitable for analysis in this area; the fugue from the *Sonata No. 2 for Violin without Bass accompaniment in A Minor, BWV 1003* will serve as a representative example in this examination of performance practice. Bach himself later transcribed the entire *A Minor Sonata* for the harpsichord, and the score for this work also provides insights, even for violinists (Lester 23).

The violin in use during Bach's life closely resembles those used today in shape and measurement; however, performers should consider two key differences in its fittings when emulating the performance style and sound quality likely produced in the early 18th century. First, violin bridges before about the 19th century curved slightly flatter than bridges constructed thereafter [Appendix A]. As a result, less arm motion was necessary for the execution of string crossings, and it was easier to play two or three strings simultaneously (Boyden 320). However, in spite of the flatter bridge, there is no evidence that violinists were expected to perform full quadruple stops – four strings – simultaneously; Jean-Jacques Rousseau, a 18th century music theorist in addition to philosopher, notes this in his *Dictionnaire* (Donington 93). Second, the four strings were generally wound from animal gut, with the possible exception of the lowest string – the G-string – that, according to music theorist Sébastien de Brossard in his 1712 treatise, was frequently entirely wound with silver. This resulted in a slower sound response as well as more subdued volume than is possible with the metal wound strings used today (Boyden 321).

Compared with the slight modifications made to the violin between the early 18th century and the present, extant bows constructed before 1750 bear significant differences from those used today [Appendix B]. While craftsmen did not appear to implement any standards regarding the length, weight, or exact shape of their bows even until the 1800's, in general, bows dating from the Baroque era period tend to be several inches shorter than today's bow, which allows the horsehair to stretch about twenty-five inches in length (Boyden 207). The bow stick almost invariably curves outward away from the hair, unlike the modern model, which curves slightly into the hair. German bows in particular

held onto this characteristic the furthest into the early 18th century, and also featured the most definite curvature as compared to those used in France and Italy. Violinists, as a result, could execute simultaneously timed triple stops – although again, most likely not quadruple stops – in a more facile manner than can be done with today's bow. As these bows are lighter than the modern bow, the sound they produce from the violin is more transparent; additionally, because the bulk of the weight of the bow is balanced toward the frog, the volume of sound naturally decays, even on sustained notes, particularly when drawing the bow from the frog to the tip (326).

During the early 20th century, scholars, seeking to rectify what they viewed as a discrepancy between the duration of chords in Bach's works and what could be feasibly performed on the instrument, assumed that a different bow altogether than the one described above – a bow with the capabilities to sustain even quadruple stops – must have existed in Bach's time. Scholar Arnold Schering was the first to promulgate the theory of a "Bach bow" in 1904, describing a bow in which the thumb would control the tension of the horsehair, tightening it for melodic, monophonic passages, and relaxing it for chords. Scholar Albert Schweitzer accepted Schering's theory, and explained and defended it in his 1905 biography of Bach. This widely read book led a variety of violinists and bow makers over the next half-century or so to experiment with recreating the "Bach bow" (Kolneder 314). This resulted in models in which the stick hooked more steeply convex than in any extant Baroque bows with a frog containing a ring in which the thumb would rest so that it could control the tension of the hair [Appendix C]. However, while the problem of sustaining triple and quadruple stops appeared to be resolved, one fundamental issue remained: the sound produced was relatively weak,

seemingly out of character with, for example, the musical spirit of Bach's fugal or dance suite movements (315).

The simple fact that no similar bow dating from the 17th or 18th centuries has survived despite the existence of many other bows from that period suggests that Schering and Schweitzer's theory is erroneous. Further compounding the evidence against the "Bach bow," none of the treatises or articles from the time period known as the Baroque era or the years following it mentions such a bow, nor do any illustrations of it remain (315). Clearly the answer to the problem of Bach's chords is more complex than simply a difference of equipment. Fortunately, the same treatises that fail to mention the "Bach bow" do instruct in violin technique and usually address the execution of multiple stops.

While in the 17th and 18th centuries a greater degree of musical knowledge traveled across country borders than previously, some national differences in instrumental technique remained; therefore, it is best to begin by examining the writings of musicians from Bach's native Germany. Flautist and composer Johann Joachim Quantz (1697-1773) in 1753 published the treatise *On Playing the Flute*, which, despite its title, covers not only flute technique but also teachings on musical notation, form, how best to practice and perform, a discussion of orchestral string playing, as well as commentary on a few German composers, Bach included. Having seen him perform at the organ several times, Quantz discusses Bach's keyboard technique; however, he says very little about his compositional style and does not refer to any works written for other instruments (Quantz xx). In his general recommendations to violinists, Quantz notes the proper technique for playing chords, stating that the lowest notes must be played quickly,

without sustain regardless of the tempo of the work. In chords not followed by rests, the top note will remain sustained for the full duration of the rhythm. Quantz states the effect of breaking a four-note chord will sound as "a chord arpeggiated in triplets" (227). One must consider, however, that Quantz specifically targeted these instructions at ripieno – orchestral – violinists accompanying in a concerto grosso or concertate, so these recommendations may not apply to solo performance.

Leopold Mozart (1719-1787), a violinist, teacher, and most prominently, father to famed son Wolfgang Amadeus, in 1756 wrote *A Treatise on the Fundamental Principles of Violin Playing*. While not specifically referring to Bach, the treatise assists in understanding the level to which violin technique had developed around the same time as the *Sonatas and Partitas* were written. Mozart spends a great deal of time discussing the effect of multiple stopping on the need to change the position of the left hand; however, his words regarding their execution in the right arm are brief. Following the description of a triple stop, Mozart asserts that all three notes "must be taken together at the same time and in one stroke" (Mozart 160). Later in the treatise while discussing orchestral playing, he reaffirms this statement, describing his ideal chords as played "smartly and together" (224). Unfortunately, Mozart does not make mention of the proper sustain of chords, only their attack.

Other non-German musicians and scholars of the era had their own opinions regarding the performance of chords; while their school of string technique might have differed slightly from that in which Bach's violinist acquaintances were trained, their ideas remain valid. Jean-Philippe Rameau (1683-1764) recommends that, where two or more notes cannot easily be performed together on the instrument, the notes should either

be arpeggiated or that the violinist should give weight and sustain to whichever note forms part of the melodic line, regardless of its placement within the chord (Donington 93). Marin Mersenne (1588-1648), also French, admits in his treatise *Harmonie universelle* that the bridge would need to be even flatter than its typical curvature in order for more than two strings to be played simultaneously (Efrati 209). While regional differences regarding sound quality preference or advancements in violin technique may have affected the opinions of these two musicians, given the lack of explicit instruction from Bach himself, their suggestions should be considered when attempting a historically informed performance of the *Sonatas and Partitas*.

While Bach unfortunately left no writings behind regarding the performance of his unaccompanied violin works, the scores themselves can provide ample evidence of Bach's intentions. However, it is important to consider a difference in mindset between modern performers and those active during what is considered the Baroque era regarding musical notation; teachers often instruct today's musicians to play the music exactly as written on the page. While this approach is successful when applied to more recent compositions, applying it to works of other eras contains risks. In the words of music critic Alex Ross, before about the middle of the 19th century, performers viewed the scores "less like papal writs than like cooking recipes:" the score provided guidelines that could be altered to the taste of the musician (Ross "Escaping the Museum").

This idea surfaces as early as in the writings of Bach's son Carl Philipp Emanuel. In his *Essay on the True Art of Playing Keyboard Instruments*, he writes of holding notes "played neither detached, nor legato or sustained" for roughly half their written value (Efrati 202). Modern Baroque scholars such as Robert Donington consider Bach's

notation a representation of how the music will be heard by the ear. While the performer may not physically be able to execute fully the written sustain of the chords, the listener's brain is able to complete the polyphonic texture (Donington 92).

As further proof of the flexibility of notation, for much of what is today called the Baroque era, specifically in France and Germany, composers expected performers to embellish significantly the notes composed on the score through the addition of ornamentation. While Bach preferred not to lend this degree of freedom to performers of his works, instead in effect writing out his desired ornaments, this sense of notational fluidity likely remained (Vogt 58). Additionally, it became standard practice after about 1600 among composers to, in keyboard accompaniments, provide only a monophonic bass line and figures underneath detailing the desired harmonic structure, a system referred to as figured bass; figure 1 provides an example of this notation as seen below the staff. Keyboard players were then expected to fill out the chords, referred to as realizing a figured bass, in a thicker accompaniment texture, most likely improvising this even in performance, shown in figure 1 with the smaller noteheads above the bass line (Burkholder 301). Bach, in his chamber music, used figured bass notation, lending freedom to the performer (451).

Figure 1:
Figured Bass Notation and Realization

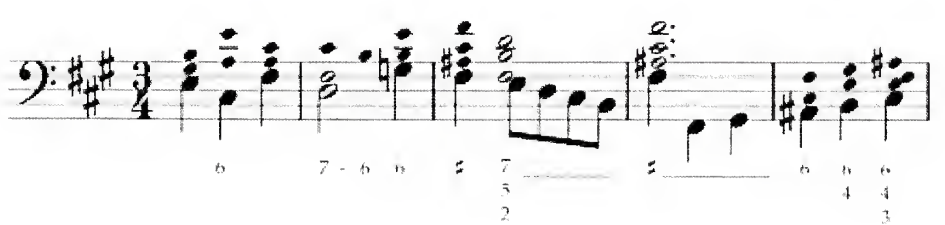
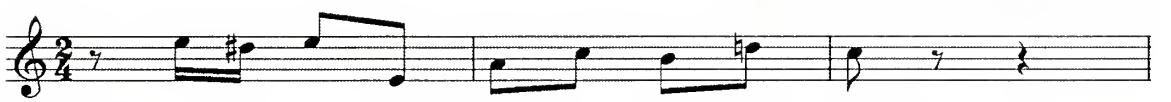
Beschränkt, ihr Weisen, BWV 443

In the *Fuga* of the *Sonata No. 2 in A Minor*, numerous examples exist of what modern performers might consider a discrepancy between Bach's notation and what is feasible on the violin. This movement, placed in a work resembling the structure of a sonata da chiesa or church sonata, is preceded by a slow, improvisatory *Grave*, and followed by a polyphonic *Andante* and finally an *Allegro* finale. The movement features a short, lively, yet simple fugue theme in duple meter, shown in figure 2, that Bach develops over a span of 291 measures.

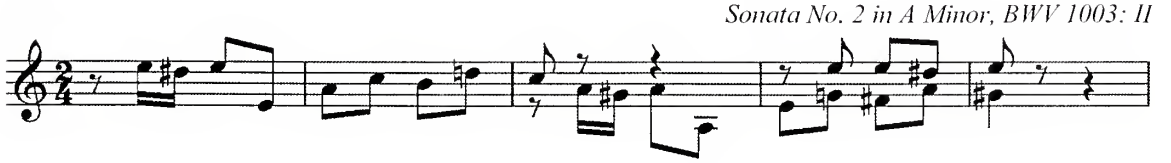
Figure 2:
mm. 1-3

Sonata No. 2 in A Minor, BWV 1003: II



Bach's notation of this movement reflects a polyphonic conception and expression of the entries of multiple voices. As noted by modern Bach biographer Martin Geck, a true fugue is not feasible on the violin; however, the impression of one can be conveyed, through primary and secondary entrances of a theme with interludes in between (Geck 548). Even in the two opening statements of the theme, Bach uses rest symbols as well as independent notehead stems to differentiate between the two voices, even though one violinist plays both. As shown in figure 3, Bach clarifies that the melodic line from measures one through four is not continuous, but rather split between soprano and alto-type voices.

Figure 3:
mm. 1-5

Sonata No. 2 in A Minor, BWV 1003: II

Furthermore, Bach – as well as other Baroque composers – elected in polyphonic works to lengthen note values to clarify harmonic progressions as well as the direction of melodic phrasing in each voice, an example of which is shown in figure 4 (Stowell 150). In measure 18, Bach brings one phrase to a close, immediately following it with a subsequent phrase. The upper voice, from the second beat of mm. 18 through m. 23 consists solely of quarter notes. Now, given the texture and bowing indications in the lower voice, it is not possible to sustain these notes as quarter notes, but rather they must in practice be modified to eighth notes. Figure 5 provides a practical notation of how a violinist would, out of necessity, perform this passage.

Curiously, on the first beat of m. 18, Bach notates the top voice solely as an eighth note, despite the same pattern in the lower voice as continues for the next five measures. Bach's wish to express phrasing intentions and voice leading in his score is the most reasonable explanation for this occurrence. As the prior phrase, carried predominantly by the upper voice, ends on the downbeat of measure 18, Bach wants the performer to reflect this in his playing by deliberately tapering the length of the downbeat so as not to connect it to the following material. However, from mm. 18-23, he, although knowing that it is impossible to sustain the upper voice as he notates it, wants the performer to retain a sense of continuity through the entire phrase.

Figure 4:
mm. 16-23

Sonata No. 2 in A Minor, BWV 1003: II

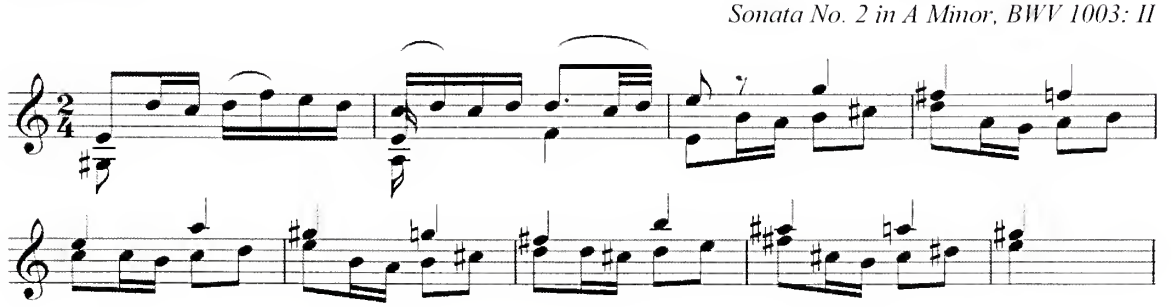


Figure 5:
mm. 16-23 as can be executed on the violin

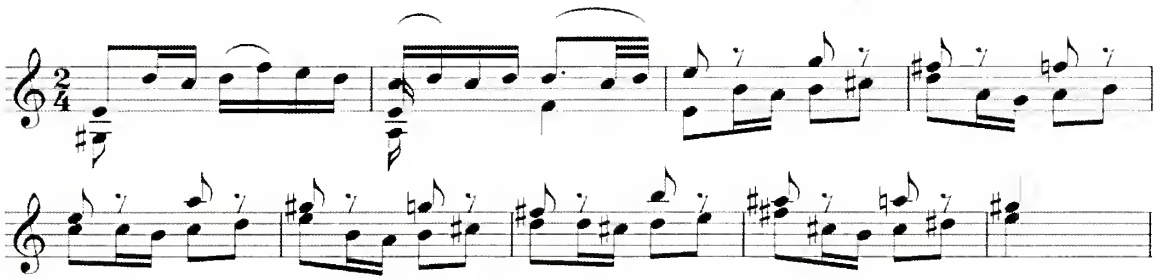
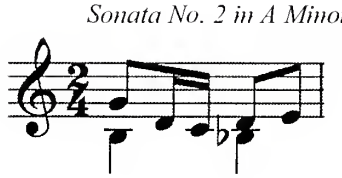
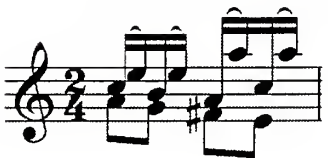
Sonata No. 2 in A Minor, BWV 1003: II

In a parallel passage later in the movement, shown in figure 6, Bach actually notates a double stop unplayable if the performer intends to sustain all the given notes their written value. To successfully play measure 237, the lower pitch, a quarter note B, must be released after an eighth note as in the passage explained above, not just because of the separated bowings, but more significantly due to the fact that this note and the C written on the last sixteenth of the beat can only be played on the G-string; it is of course impossible to play two different notes simultaneously on the same string.

Figure 6:
m. 237

Sonata No. 2 in A Minor, BWV 1003: II

Similarly, measure 60, shown in figure 7, presents another functional impossibility. As written, to sustain the two eighth notes falling on the second beat of the measure while playing slurred sixteenths in the upper voice would require a stretch of the fingers to a range rarely seen even in contemporary violin music due to its difficulty. Rather, the figure – in this specific measure as well as similar iterations of it from mm. 46-60 – should be played crossing three strings of the violin each time, in order to

highlight the counterpoint between the double stops, effectively a lower voice – and the off beat sixteenth notes, effectively an upper voice.

Figure 7:
m. 60

Sonata No. 2 in A Minor, BWV 1003: II

Beyond representative examples from the violin score, considering the notation in Bach's transcription of the sonata to the harpsichord proves an enlightening venture. Bach's arrangement, an independently titled *Sonata in D Minor, BWV 964*, in addition to transposing the key area to one more fitting for the keyboard, expands upon the music written in the violin version, often adding additional fugal voices or countersubjects to fill out the harmony. However, the basic thematic and melodic structure remains a copy from the original, allowing for comparative analysis.

Unlike the organ or the modern piano, the harpsichord, as a plucked instrument lacking sustain pedals, does not have the ability to maintain sound much past the impetus of a keystroke, and at any rate, the duration of resonance cannot be actively controlled by the performer. However, as in the polyphonic works for violin, Bach still varies his rhythmic notation to suit the voice structure, articulation, or phrasing of the movement. For example, from mm. 30-33, displayed in figure 8, he clarifies the roles of three independent voices by sustaining the downbeat of measures 30 and 32 through the downbeat of the following measure. Barring a very resonant performing hall, it is unlikely that the sound would last the full duration given; however, resulting from this specific notation, Bach ensures that the performer is aware of a sense of melodic

continuity in the upper voice. In the parallel passage from the *A Minor Sonata*, Bach does not notate that this note should be sustained, although performers should be aware of a musical discourse between two independent voices.

Figure 8:
mm. 30-32

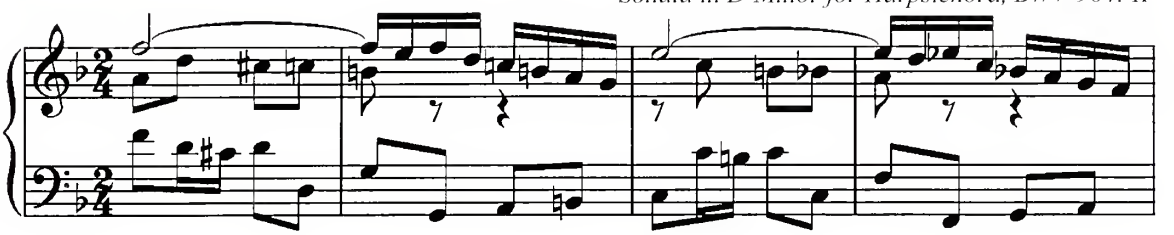
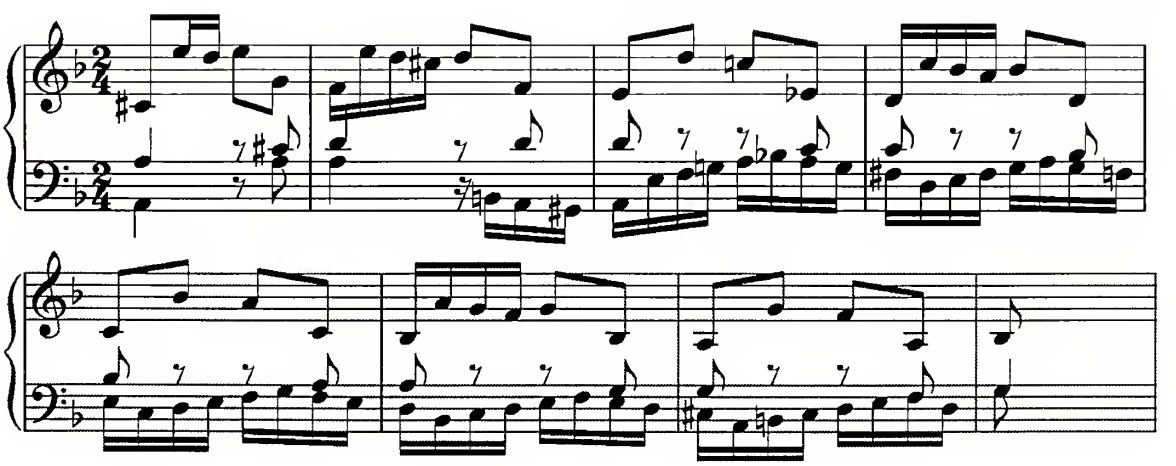
Sonata in D Minor for Harpsichord, BWV 964: II

Likewise, the reverse effect is apparent. In observing mm. 262-269, shown in figure 9, one notices a fairly unassuming middle voice supplying additional tones of the harmony in between the theme and its counterpoint. With the exception of the beginning and end of the phrase, Bach notates this voice in eighth notes, likely not for exactness of desired note length, but rather to emphasize its secondary role and effect an articulation that blends the voice into the background.

Figure 9:
mm. 262-269

Sonata in D Minor for Harpsichord, BWV 964: II

With less stress on following exact rhythmic notation regarding the sustaining of sound, returning to the violin score, *BWV 1003*, allows for a practical application of the conclusions drawn regarding performance of multiple stops in stylistic accordance with the 1700s by examining the period violin and bow as well as the ideas of Bach's contemporaries. Guiding principles regarding sound quality should include aiming for resonance and clarity (Donington 77). Due to the use of mellower gut strings, violins in the 17th and 18th centuries were capable of less volume projection than today's instruments. However, as said by Leopold Mozart, a violinist "should at all times play earnestly, with all his powers, strongly and loudly; never weakly and quietly" (Mozart 63).

Throughout the entire *Fuga*, the theme or thematically derived material should take precedence, with efforts made to control any multiple stops occurring in the middle of the theme so that they do not interrupt the flow or dynamic register. Regarding the attack and release of multiple stops, despite disparate or ambiguous opinions among musicians of the era, it can be concluded that quadruple stops should be broken, albeit quickly. Triple stops generally may be executed with a simultaneous impulse; however, should the quality of sound suffer from roughness or the chord have a noticeable accent, it is better to break these slightly as well. As a final principle, one should adhere to Bach's original bowings as much as possible, as he was a well-trained violinist and certainly understood the instrument for which he was composing. When necessity requires that these original bowings be adjusted, the articulation should not be altered as a result.

Rameau's rule of bestowing more weight of sound on whichever voice carries the melody should be at the forefront a performer's mind in a couple of places in this movement, particularly in sections where the bass voice has the theme. In mm. 38-42, the theme passes between three different voices, with quadruple stop accompaniment throughout, as shown in figure 10. Particularly in measure 40, it is important to manage the weight and speed of the bow so that the upper notes, which are not melodic until measure 42, do not overwhelm the presence of the theme. Because the E and A strings naturally sound bright, players should consciously decrescendo into the top notes of the chord. Similarly, Rameau's principle applies in parallel sections later in the movement.

Figure 10:
mm. 38-42

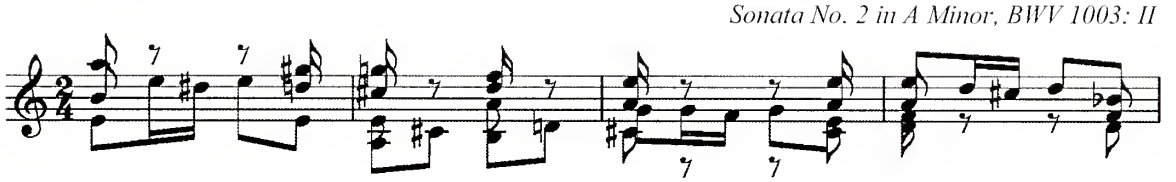
Sonata No. 2 in A Minor, BWV 1003: II

From mm. 106-110, displayed in figure 11, it is again important to keep volume distribution in mind. However, it should be noted that in accordance with the phrasing, the quadruple stops end the antecedent chain of coupled sixteenth notes; therefore, on the downbeat of measure 107, the top note – F# – should be the most prominent, while a measure later, the bass of the chord – B – should receive the most weight. For cases such as the downbeats of measures 109 and 110, in which a tone in the middle of the quadruple stop should be emphasized, a slightly greater sustain on the note in the context of breaking the chord should be attempted.

Figure 11:
mm. 106-110

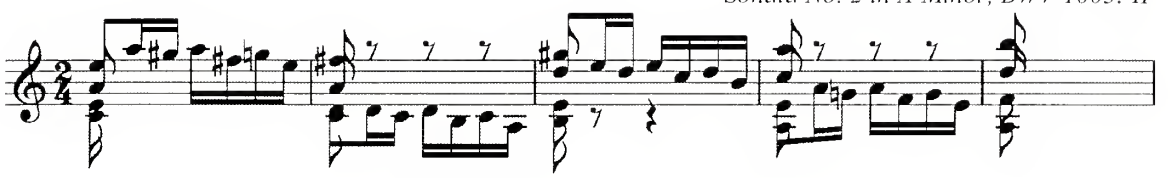
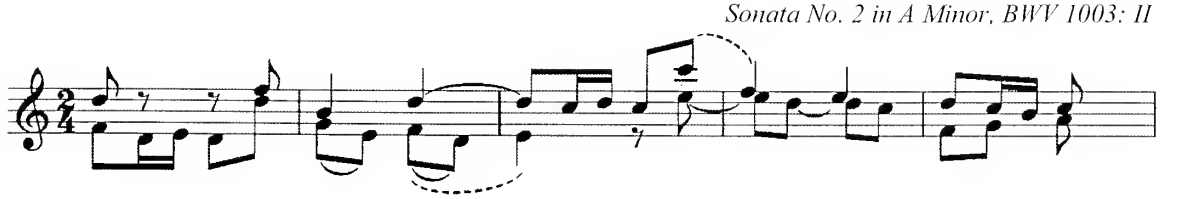
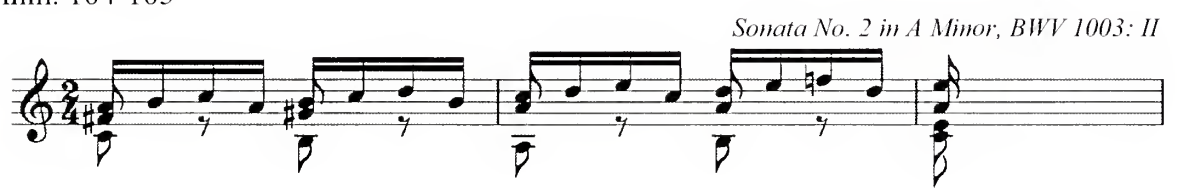
Sonata No. 2 in A Minor, BWV 1003: II

As Bach took care to indicate intended bowings and considering his own training and career as a violinist, it is best to follow them wherever possible, particularly guarding against the addition of slurs, since the articulation will be affected. However, the *Fuga* contains a couple of exceptions. In mm. 129-131, Bach writes a chain of syncopated suspensions between two voices, as seen in figure 12. As written, the entrances of both parts should be bowed detached, yet remain a part of a connected phrase. However, given that the passage is played on only one instrument, this is not possible as written. As the syncopated voice provides dissonance on the beats, it should be sustained full value; the upper voice playing on the beat, half as long as written. The upbeat into measure 130 requires that violinist add a slur in the upper voice moving C – F as not to break the tie in the syncopated voice, as indicated in figure 12 by a dashed slur. Similarly, two measures prior, the need to sustain the top voice playing D into the downbeat of measure 129 in order to sound the dissonance with the lower voice requires an added slur. Later in the movement, another exception for the same reason occurs moving between mm. 177-178.

Figure 12:
mm. 127-131

Sonata No. 2 in A Minor, BWV 1003: II



On the other hand, some editors have gone too far in trying to rectify problems between Bach's notation and what can be physically performed on the instrument. For example, in mm. 104-105, shown in figure 13, Bach requests that all the sixteenth notes be detached, even though sustaining the bottom two pitches of each of the four triple stops at the same time for a full eighth note value is not possible. To overcome the physical limitations and allow for sustained chords, some editors indicate that the notes should be slurred in groups of four. However, the lowest notes of each chord are akin to a descending bass line providing harmonic context and a direction of phrasing, and sustaining these for their exact duration is not of great importance. A slight emphasis given on each of the beats within the context of a crescendo phrasing is all that is necessary to highlight the triple stops – which should be attempted simultaneously as to minimize their interruption of the continuous sixteenth notes in the upper voice.

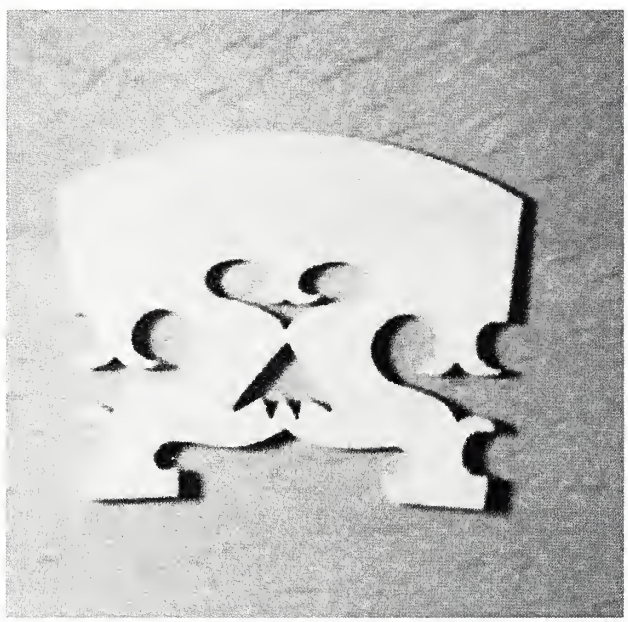
Figure 13:
mm. 104-105

Regarding the performance of Bach's polyphony, the outlined principles apply throughout the collection of *Sonatas and Partitas for Violin without Bass accompaniment*, proportioned to the tempo and character of each movement. To best reflect the intentions of the composer, less emphasis should be placed on sustaining all notes for their written value, with more emphasis on achieving a pleasing quality of sound and giving thematic material prominence. In quick tempos, triple stops should be, where possible, taken together in one impetus; quadruple stops, however, should always be broken. However, when adjusting for slower movements, the amount of arpeggiation,

even in three-note chords, may increase. Careful study of the score, and a knowledge of the limitations of the Baroque instrument as well as the opinions of musicians of the era regarding technique or style aid in any examination of historical performance practice. In spite of the hundreds of years separating today's violinists from the composer, stylistic interpretation of Bach's music need not be an enigma; alternative sources provide keen insights for an informed performance.

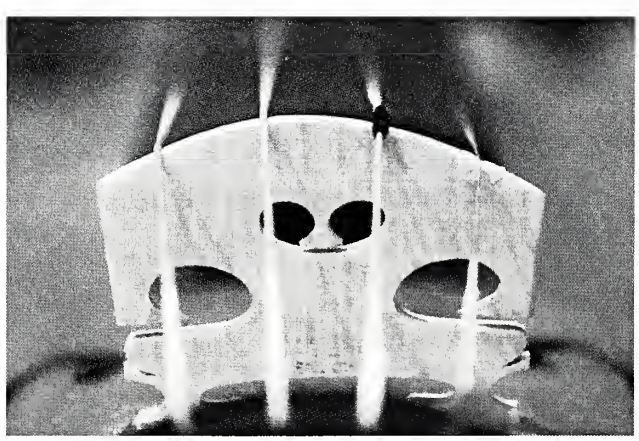
Appendix

Appendix A

Bridge used ca. 1600-1800

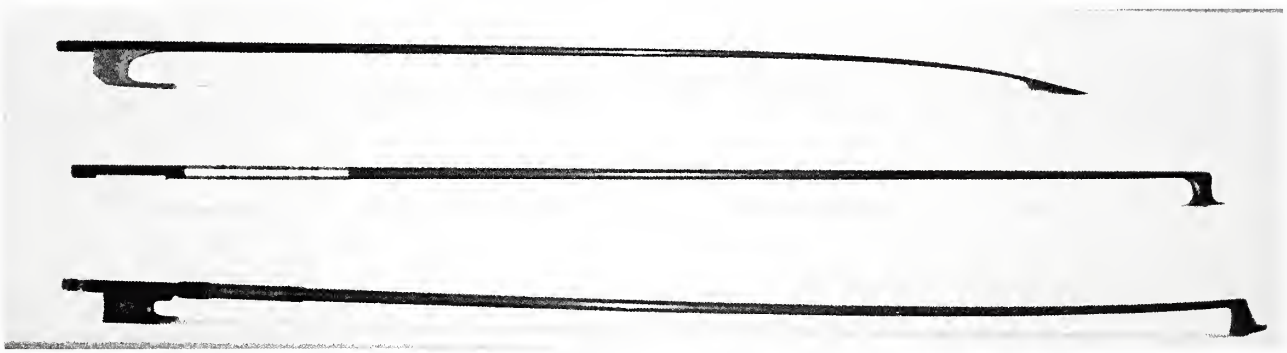


Modern-day bridge



Appendix B

(From top) Baroque (ca. 1600-1750), early Classical (1750-1825), and modern-day bows



Appendix C

Bow maker's realization of the "Bach bow" as played (right), with comparison to the modern-day bow

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